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Sei v 1

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 10-254581

(43)Date of publication of application : 25.09.1998

(51)Int.Cl.

G06F 17/16
G06F 9/00

(21)Application number : 09-056474

(71)Applicant : UCHIDA YOKO CO LTD

(22)Date of filing : 11.03.1997

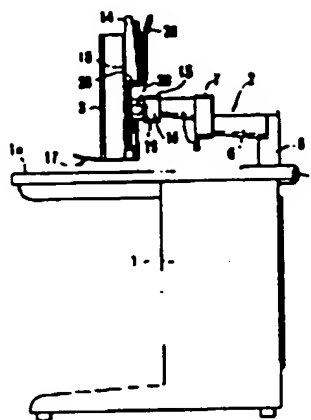
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HOSOI YASU HARU

(54) FLAT DISPLAY MOUNTING DEVICE

(57)Abstract:

PROBLEM TO BE SOLVED: To prevent the extinction of the space of a desk top surface by mounting and storing a keyboard behind a flat display when it is not used.

SOLUTION: Relating to this flat display mounting device for which the back plate 18 of a flat display(FD) mounting plate 17 is supported so as to be turned upward to the tip of an FD supporting arm 2 fixed to a desk or the like and is free to swivel within a horizontal plane, for the FD mounting plate 17, a keyboard receiving member 26 is attached behind the back plate 18 and the keyboard 14 is mounted and stored between the pack plate 18 and the keyboard receiving member 26.



LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

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Sei v 2

(19) 日本国特許庁 (JP)

(12) 公開特許公報 (A)

(11) 特許出願公開番号

特開平10-254581

(43) 公開日 平成10年(1998)9月25日

G1) Int Cl ⁴	国際記号	P I	
G 0 6 F 1/18		G 0 6 F 1/00	3 1 2 V
G 0 9 F 9/00	3 5 1	G 0 9 F 9/00	3 5 1

特許請求 未請求 請求項の数 6 O L (全 8 頁)

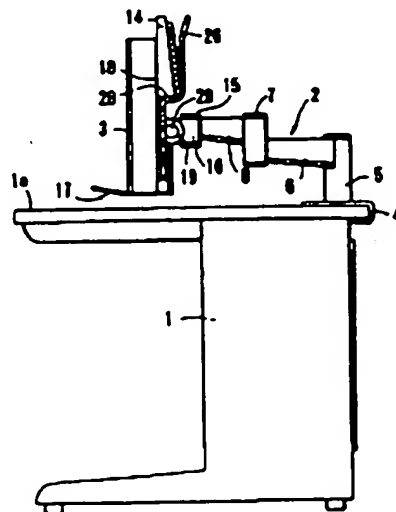
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(54) 発明の名称 フラットディスプレイ装置

(57) (要約)

【課題】 キーボードの不用時にフラットディスプレイの背後に収容するようにして机上面のスペースの確保を助くようにすることを課題とする。

【解決手段】 机等に固定され水平面内で回転自在なFD支持アーム2の先端にFD設置板17の背板18が備わっており、FD設置板17は、その背板18の背後にキーボード受部材26を取付け、前記背板18とキーボード受部材26との間にキーボード14を収容し得るようにしたことがある。



Sei v. 2

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CLAIMS

[Claim(s)]

[Claim 1] It is flat display installation equipment characterized by FD installation board attaching keyboard receiving part material behind the background, and enabling it to carry out installation storing of the keyboard between the aforementioned background and keyboard receiving part material in the flat display installation equipment with which it was fixed to the desk etc. and the background of FD installation board was supported possible [forward-and-backward inclination] at the nose of cam of FD support arm in which it can circle freely in the level surface.

[Claim 2] the cylindrical material in which the aforementioned keyboard receiving part material has elasticity -- the shape of a downward abbreviation KO character -- forming -- the leg of right and left of this keyboard receiving part material -- support of the aforementioned FD installation board in back -- the flat display installation equipment according to claim 1 currently made as [make / set up / insert in a hole and / it]

[Claim 3] Flat display installation equipment according to claim 1 or 2 which has the installation shelf which is horizontally crooked in the upper part of the aforementioned keyboard receiving part material, attaches a shelf board in the crooked range, and enabled it to lay accessories, such as a mouse, on this shelf board.

[Claim 4] It is flat display installation equipment which carries out [that a FD installation board attaches a pre-guard and keyboard receiving part material behind the background, and enabled it to carry out installation storing of the keyboard between the guard before the above, and keyboard receiving part material in the flat display installation equipment with which it was fixed to the desk etc. and the background of FD installation board was supported possible / forward-and-backward inclination / at the nose of cam of FD support arm in which it can circle freely in the level surface, and] as the feature.

[Claim 5] the cylindrical material in which the aforementioned keyboard receiving part material and a pre-guard have elasticity -- the shape of a downward abbreviation KO character -- forming -- the leg of right and left of this keyboard receiving part material and a pre-guard -- support of the aforementioned FD installation board in back -- the flat display installation equipment according to claim 4 currently made as [make / set up / insert in a hole and / it]

[Claim 6] Flat display installation equipment according to claim 4 or 5 which has the installation shelf which is horizontally crooked in the upper part of either a front [ab ve] guard or keyboard receiving part material and both

Seite 2 von 2

sides, attaches a shelf board in the crooked range, and enabled it to lay accessories, such as a mouse, on this shelf board.

[Translation done.]

Sei v 1

(2)

特開平10-254381

【実施例の概説】

【請求項1】 両端に固定され水平面内で回転自在なFD支持アームの一端にFD設置板の背面が回転可能に支持されたフラットディスプレイ設置装置において、FD設置板は、その背面の背内にキーボード受部材を取付け、前記設置板とキーボード受部材との間にキーボードを設置し得るようにしたことを特徴とするフラットディスプレイ設置装置。

【請求項2】 前記キーボード受部材は、傾斜を有する傾斜板により下面が略コ字状に形成し、このキーボード受部材の左右の側部を前記FD設置板の背面の支持孔に挿入して立設せしめようになされている請求項1記載のフラットディスプレイ設置装置。

【請求項3】 前記キーボード受部材の上部を水平方向に旋回し、その旋回した状態に傾板を取付け、この傾板上にファス等の小凸部を設置し得るようにした設置板を有している請求項1または2記載のフラットディスプレイ設置装置。

【請求項4】 両端に固定され水平面内で回転自在なFD支持アームの一端にFD設置板の背面が回転可能に支持されたフラットディスプレイ設置装置において、FD設置板は、その背面の背内に前記キーボードおよびキーボード受部材を取付け、前記設置板とキーボード受部材との間にキーボードを設置し得るようにしたことを特徴とするフラットディスプレイ設置装置。

【請求項5】 前記キーボード受部材および傾板は、傾斜を有する傾板により下面が略コ字状に形成し、このキーボード受部材および傾板の左右の側部を前記FD設置板の背面の支持孔に挿入して立設せしめようになされている請求項4記載のフラットディスプレイ設置装置。

【請求項6】 前記傾板またはキーボード受部材の一方または双方の上部を水平方向に旋回し、その旋回した状態に傾板を取付け、この傾板上にファス等の小凸部を設置し得るようにした設置板を有している請求項4または5記載のフラットディスプレイ設置装置。

【発明の詳細な説明】

【0001】

【発明の属する技術分野】 本発明はフラットタイプのディスプレイを設置してディスプレイをデスク上で使用するためのフラットディスプレイ設置装置に係り、特にキーボードの不用時にこれを収納することができるフラットディスプレイ設置装置に関する。

【0002】

【従来の技術】 近年、パーソナルコンピュータ（パソコン）等のOA機器は、オフィスはもとより家庭においても多く使用されるようになっており、その普及にはめざましいものがある。

【0003】 ところで上記のようなOA機器のCRTディスプレイは大きい傾斜角を有する机の上に使用す

る場合にその机上面を大きく占有し、他の機器に著しく干渉をきたしていた。

【0004】 このようなことから近年では、マウスや使用のCRTディスプレイに代り、大型でフラットな薄型液晶等の薄型ディスプレイ（以下フラットディスプレイと称し、明細書においてFDと略称する）が急速に普及している。

【0005】 上記のFDは、設置机の上に立てて置くFD用スタンドにFDを立てて設置し、見易い位置に置くようにして使用されている。

【0006】 しかしこのようなスタンドでは、FDを使用し易い位置に移動せしめるときFDを含むスタンドの重量が大きいのでその移動が容易でない。

【0007】 そこでFDを必要に応じて使用し易い位置に移動させることができるようにするため、図13に示すように机1の後面にFD支持アーム2を取付け、この支持アーム2の先端にFD3を立てて置くようにしたものが採用されるようになっていた。

【0008】 上記FD支持アーム2は、机1の天板1aの後面に嵌合して固定し得る取付具4に支持5が立設され、この支持5の上部側に第1の支持アーム6が水平方向に旋回され、この支持アーム6の先端に傾板7を介して第2の支持アーム8が水平面内で回転自在に立設され、さらにこの支持アーム8の先端に図14に示すような傾斜調整機構を有するFD設置板9の背面が設けられ、0の背面の傾板部11は傾板12により傾斜自在に取付けられたもので、このFD設置板9の水平方向側方に突出した傾板部13にFD3を立てて置くように構成されている。そして傾板部14やファスは傾1上に置いて使用される。

【0009】 しかしながらFD設置板9は、前記支持アーム6、8の旋回により水平面内任意位置へ動かすことができ、傾角については傾板部12を介して傾板部12を中心と旋回させることにより最適な角度に設定することである。

【0010】

【発明が解決しようとする課題】 上記のFD支持アーム2を使用することにより、FD3を使用しないときは背面にならない位置へ退避させておくことができるので、机上面の有効利用を果たすことができるが、キーボード14やファスは常に机上面の奥側へ移動せしめられて使用として大きなスペースを占有してしまい、他の機器に干渉をきたすことが避けられなかった。

【0011】

【課題を解決するための手段】 本発明は、キーボードの不用時にキーボードやファスをFD支持アームにFDと共に収納しておけるようにし、机上面での他の機器の進行に支障をきたすことかないようにすることを課題としてなされたものである。

【0012】 上記課題を解決するための手段として本発

Sei v 1

(3)

特開平10-254581

明は、図1に示された水平面内で図1(a)に示すF D支持アームの先端にF D設置板の背面が前面の面に対して支持されたフラットディスプレイ設置位置において、F D設置板は、その背面の背面にキーボード受部14を設け、前記背面とキーボード受部14との間にキーボードを収容可能にするようにしたことにある。

【0013】そして前記キーボード受部14を前記図1により下向きに凹み込むように形成し、このキーボード受部14の左右の側部をF D設置板の背面の背面側に設けた支持孔に挿入するようにして、F D設置板の背面とキーボード受部14との間にキーボードを前向きとして立てた状態で設置可能にするように構成することから成る。

【0014】図1に示された水平面内で図1(a)に示すF D支持アームの先端にF D設置板の背面が前面の面に対して支持されたフラットディスプレイ設置位置において、F D設置板は、その背面の背面に前記キーボード受部14を設け、前記キーボード受部14とキーボード受部14との間にキーボードを収容可能にするようにすることにより、キーボードを一層安定よく設置可能にしておくことである。

【0015】さらに前記キーボード受部14または前記キーボード受部14を有するときはその上部を水平方向に延伸し、その延伸した位置に前面を設けて設置板とし、この設置板の上にフラットディスプレイを設置しておくことができるようにすることにより、キーボードを広く使用することができる。

【0016】

【発明の要旨の記述】以下、本発明を図1に示す実施の形態を参照し、図13と共通する基本構成部分については同一符号を用いて説明する。

【0017】図1は本発明によるフラットディスプレイ設置板の使用状態を示し、図2は同下使用状態時にキーボード14を収容可能にした状態の断面を示している。

【0018】F D支持アーム2は両端の両端に図1(a)の両端部に結合して図1(a)に示すように固定し得る取付具4の上端に立設された支持5と、この支持5の上端一端に水平方向に延伸された第1の支持アーム6と、この支持アーム6の先端に図7により図1(a)に示された第2の支持アーム8とで構成され、この支持アーム8の先端の図7により図1(a)に示す第16のF D設置板17の背面18の背面中央部に設けられた前受部19に図7により図1(a)に示すように固定することから成るようになっている。

【0019】上記F D設置板17は、図2、図3に示す実施の形態では前向きに水平に延伸し、その背面18の背面に設けられる前受部19より上方の位置で上方部が前方に突出するようにラック状に延伸されて図21が形成され、この図21の下部の背面18の背面側の左

右両側部には当該図21の両側部の端部を有するよう凹み込むように形成された前受部122、22がその下に突出するフランジ部22a、22bで背面18にサポート座持、またはクッション、接着等により固定され、前記図21および前受部122、22の上端部22c、22dに支持孔23、23、24、24が同一軸線上に形成されている。なお図25、25、25a、25bはF D30を設けけるための背面18の所定位置に形成された取付孔である。

【0020】キーボード受部126は、弾性を有する金属材料（またはパイプ）により正歪曲において下向きに凹み込むように形成され、左右の側部27、27はその中間で前面側ラック状に延伸されてその水平部分がキーボード受部28、28とされたもので、その左右の側部27、27の両端は前記F D設置板17の左右の支持孔23、23の両端と等しく設けられており、これら側部27、27の下部の両端は上記支持孔23、23の両端より若干広く延伸する弾性を有しており、これら側部27、27を左右の支持孔23、23および24、24に挿入したときその弾性により安定した状態が保持されるようになっている。

【0021】上記キーボード受部126の上部の側部29の部分はキーボード14を上方から出し入れしやすくするため若干傾斜されている。

【0022】したがって上記キーボード受部126の左右の側部27、27をF D設置板17の支持孔23、23および24、24に挿入すると、その下部は前受部122、22の下部22c、22dに当接して挿入部が決められ、安定した状態に取付けられる（図5示）。

【0023】これによりF D設置板17の背面18の背面とキーボード受部126のキーボード受部28より上方部との間に空間が設けられ、この空間内にキーボード14を前向きとして立てて挿入すれば、キーボード14はキーボード受部126のキーボード受部28、28上に設置され、図2に示したようにF D30の背面にキーボード14を保持しておくことができる。

【0024】図6～図10は実施の形態のキーボード14に付随することから成るようにするため、キーボード受部126の他に図7に示すような前部30を設けけることから成るようにしたものである。

【0025】図8に示す実施の形態では、F D設置板17の背面18の図21に片側2個ずつ支持孔31、31、32、31、32が形成され、前受部122、22の上面部22b、22bにもこの支持孔31、32と同一軸線上に片側2個ずつの支持孔33、34、33、34が形成されており、上記内部の左右の支持孔32、34および32、34には図7に示すように両側のキーボード受部126と同等な取付けで互いに凹み込むように形成され、かつ弾性を有する前部30の左右の側部35、35が挿入され、外部の左右の支持孔31、33および31、33

するようにこの図面42にフラス148や各種用品等
の1/40縮小を施けるようにしたものである。

【0036】図1（B）はカーゲートを部4126の上
部と下部とを互に開閉し、その開閉した状態に検知42

を野放しにせず、お墨田43とされ、このお墨田43に上記と
同様に50の数字を付けるようにしたものである。

【1031】とくに図11(C)はキーボード受動12

45と、脚記上段の44の下端と脚部45、45の上端

46. 46と、キータート数部47. 47を異方に向け

水平方向に圧縮して形成された互層一対の距離は48、48として抽出され、同じ上部層44と中間層46、4

8 中絶46 46と別部45. 45. 上部44と
別部48. 48とは、丁内増城9-749. 5

0.51を介して接続され、止りジ52、53、54より任意に順で読むことにより各組の長さ、高さ

「1032」キートン生誕426年（ガート3018）」

記号のほか必要に乙し補うの形勢のものを用意すること
により最も使用に便する計数のF・D制電算機とするこ

かである。またFの支持アーム218、図1の天板144
図15、図16の側面図である。図15は、図14に使用すること

てくる。さらにFD544アーム2の軌道は一例を示

たまでで、要すればF.D.J.をも文内して送附、別にしめ
したのであらばよい。

【説明の要】：以上説明したように本説明によれば、

う、ホタテスプレイを設置する設置後にキーボードを
置換することかてきるようにしたことにより キー

ートを使用しないと、純粋に紙面に描かない場所には
しておくこと、かき添えて机上画を工く使用すること、か

と、〇人職員の協作と一般事務作業との双方を一つの
により互補的に行うことかである。

【11034】またF₂の位置の質量の荷役に向ガート
よびキーホー受部材を取付け、同じ向ガートとキー

ート受部材との間にキーポートを正確に納めるように
 して、F 2 を垂直位置で立てては納めるとより一層を定よ

納めることができる。

一方または双方の上部を水平方向に圧縮し、その圧縮した部分に鋼板を敷設して鉄骨部とし、この鋼板上にマ

ス等の個物帳を整理し得るようにすればテーブル上を
らに広く使用することが出来る。

【第1】スクリーンディスプレイの使用は車のイメージ

【第2】本報欄によるフラットチェイスブレイク事例

一頁の形態を示し、キーボードを配置格納した状態を

0. 7. 2. 3.

• • • • •

ACKNOWLEDGMENTS

.../;%3e%3f=%3a;%3a7%3e/////

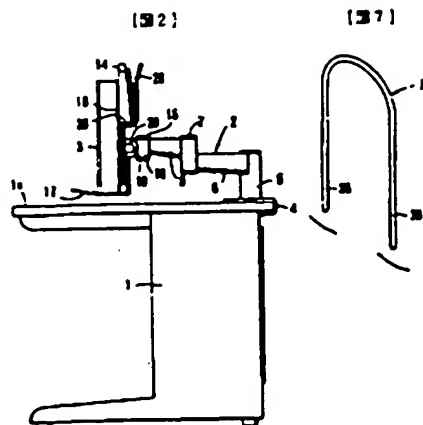
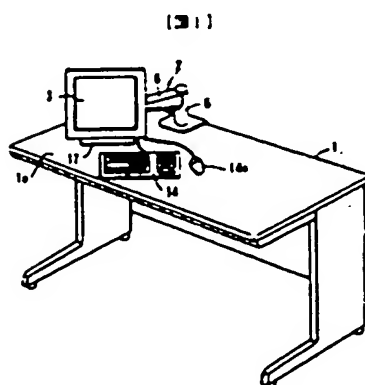
Sei v 1

(5)

特開平10-254581

【図3】図1におけるFD設置部の斜視図。
 【図4】図1におけるキーボード受部材の斜視図。
 【図5】図3のFD設置部に図4のキーボード受部材を取付けた状態を示す斜視図。
 【図6】FD設置部の正面図を示す斜視図。
 【図7】図6のFD設置部に使用する鍵ガードの斜視図。
 【図8】FD設置部の他の変形例を示す斜視図。
 【図9】図8のFD設置部にキーボード受部材および鍵ガードを両行端の小さいキーボード用として取付けた状態を示す斜視図。
 【図10】図9の両行端の大きいキーボード用とした状態の斜視図。
 【図11】(A)～(C)は鍵ガードおよびキーボード受部材の正面図を示す斜視図。
 【図12】鍵ガードにフラス設置部を設けた場合の使用状態を示す図2使用図。
 【図13】図12の正面図を示す斜視図。
 【図14】図13におけるFD設置部の斜視図。
 【符号の説明】

1 FD支持アーム
 2 FD (フラットディスプレイ)
 3 支柱
 4 FD設置部
 5 キーボード
 6 背板
 7 脚部
 8 脚受部材
 9 キーボード受部材
 10 脚部
 11 キーボード設置部
 12 鍵ガード
 13 脚部
 14 フラス等の設置部
 15 上部脚
 16 脚部
 17 中間脚
 18 キーボード設置部
 19 脚部材
 20 49, 50, 51 接続ケーブル



Sei v 2

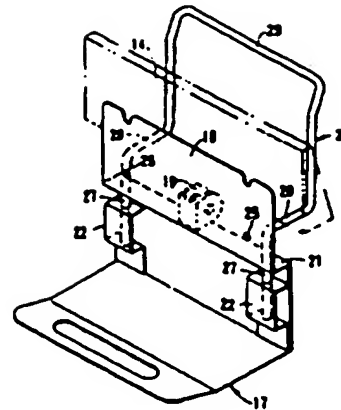
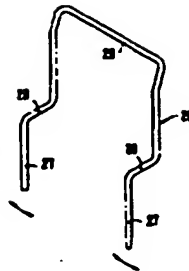
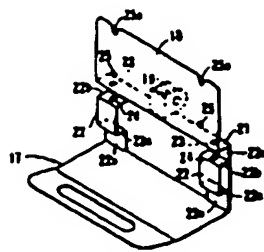
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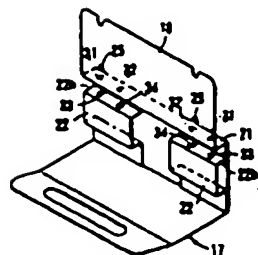
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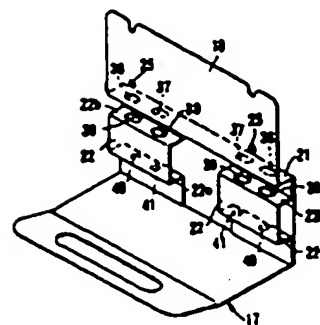
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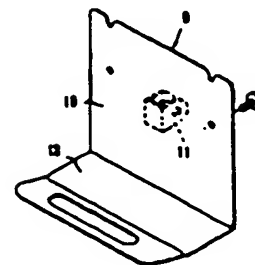
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[38]



[314]



Sei v. 6

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DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[The technical field to which invention belongs] this invention relates to the flat display installation equipment which can be applied to the flat display installation equipment for laying a flat type display and using this display on a desk, especially can store this at the time of un-using [of a keyboard] it.

[0002]

[Description of the Prior Art] Recently, many office is used also at a home from the first, and, as for OA equipment, such as a personal computer (personal computer), there is a remarkable thing in the spread.

[0003] By the way, since the CRT display of above OA equipment has large overall depth, when using it on a desk, it occupied the desk upper surface greatly, and it had caused trouble remarkably to other works.

[0004] Since it is such, in recent years, thin shape displays (a flat display is called below and it is called FD for short in a specification), such as liquid crystal of structure [that it is large-sized and flat], have spread quickly instead of the CRT display of Braun-tube use.

[0005] The above-mentioned FD stands and lays FD in the stand for FD which can be conventionally stood and placed on a desk, and as it is put on a legible position, it is used for it.

[0006] However, since the weight of the stand containing FD is large when making it move to the position which is easy to use FD, the movement is not easy in such a stand.

[0007] Then, in order to enable it to make it move to the position which is easy to use FD if needed, as shown in drawing 13, FD support arm 2 is attached in the posterior part of a desk 1, and the thing stands FD3 at the nose of cam of this support arm 2, and it enabled it to place at it is adopted.

[0008] A support 5 is set up by the fixture 4 which the above-mentioned FD support arm 2 engages with the back end edge of top-plate 1a of a desk 1, and can be fixed. The 1st support arm 6 protrudes on the up unilateral of this support 5 horizontally. The 2nd support arm 8 is connected at the nose of cam of this support arm 6 free [rotation] in the level surface through the vertical-axis section 7. The bearing 11 of the tooth back of the perpendicular background 10 of FD installation board 9 which has the shape of side **** of L characters as furthermore shown at the nose of cam of this support arm 8 at drawing 14 is what was attached inclinable by the horizontal axis 12. It is constituted so that FD3 may be stood and put on the installation section 13 jutted out ahead of [horizontal] this FD installation board 9. And the keyboard 14 and mouse for operation are

used, placing on a desk 1.

[0009] Therefore, FD installation board 9 can be moved to the arbitrary position in the level surface by revolution of the aforementioned support arms 6 and 8, and can be set as the optimal angle by loosening the aforementioned horizontal axis 12 about an elevation angle, and making it rock focusing on this horizontal axis 12.

[0010]

[Problem(s) to be Solved by the Invention] Though the keyboard 14 and the mouse were temporarily moved to the paper back side although the deployment on the upper surface of a desk could be achieved since it was made to evacuate to the position which does not become obstructive when not using FD3 by using the above-mentioned FD support arm 2, the still big space was occupied, and causing trouble to other business was not avoided.

[0011]

[Means for Solving the Problem] this invention stores a keyboard and a mouse in FD support arm with FD at the time of un-using [of a keyboard] it, and enables it to set them, and it makes making it not cause trouble to execution of other business on the upper surface of a desk as a technical problem.

[0012] In the flat display installation equipment with which this invention was fixed to the desk etc. as the above-mentioned The means for solving a technical problem, and the background of FD installation board was supported possible [forward-and-backward inclination] at the nose of cam of FD support arm in which it can circle freely in the level surface, FD installation board attaches keyboard receiving part material behind the background, and is to have enabled it to carry out installation storing of the keyboard between the aforementioned background and keyboard receiving part material.

[0013] and the support which carried out crookedness formation of the aforementioned keyboard receiving part material by cylindrical material at the shape of a downward abbreviation KO character, and prepared the leg of right and left of this keyboard receiving part material in the tooth-back side of the background of FD installation board -- it is desirable to constitute so that installation storing may be carried out, where a keyboard is stood as sideways between the background of FD installation board and keyboard receiving part material as it inserts in a hole

[0014] In the flat display installation equipment with which it was fixed to the desk etc. and the background of FD installation board was supported possible [forward-and-backward inclination] at the nose of cam of FD support arm in which it can circle freely in the level surface, a pre-guard and keyboard receiving part material can be attached behind the background, and stability can improve [board / FD installation] Installation storing further in a keyboard by enabling it to carry out installation storing in a keyboard between the guard before the above, and keyboard receiving part material.

[0015] When it furthermore has the aforementioned keyboard receiving part material or a pre-guard, the upper part is crooked horizontally, a shelf board can be attached in the crooked range, and it can consider as an installation shelf, and when **** which lays accessories, such as a mouse, in this installation shelving is made to be made, a table top can be used further widely.

[0016]

[Embodiments of the Invention] Hereafter, with reference to the form of the

operation which shows this invention to a drawing, the basic component which is common in drawing 13 is explained using the same sign.

[0017] Drawing 1 shows the busy condition of the flat display installation equipment by this invention, and drawing 2 shows the side in the state where installation storing of the keyboard 14 was carried out at the time of a "****" busy condition.

[0018] FD support arm 2 shows what is depended on the same composition as the above-mentioned conventional technology, and with the support 5 set up by the upper surface of a fixture 4 that it can fix with the screw which engages with the back end edge of top-plate 1a of a desk 1, and is not illustrated The 1st support arm 6 which protruded in the up unilateral of this support 5 horizontally. It consists of the 2nd support arm 8 connected at the nose of cam of this support arm 6 by the vertical-axis section 7 free [revolution]. The bearing 16 rotated by the vertical-axis section 15 at the nose of cam of this support arm 8 can be attached in the bearing 19 which protruded on the tooth-back center section of the background 18 of FD installation board 17 inclinable by the horizontal axis 20, and can fix now with the screw which is not illustrated in an arbitrary forward-and-backward inclination angle position.

[0019] The above-mentioned FD installation board 17 the shape of side "****" of L characters with the form of operation shown in drawing 2 and drawing 3 Nothing, It is crooked in the shape of a crank, and a step 21 is formed so that the upper part section may "****" ahead from the bearing 19 prepared in the tooth back of the background 18 in an upper position. It fixes by spot welding (or a screw, adhesion, etc.) to the shape of an abbreviation KO character at the background 18 by the flanges 22a and 22a which the foot receiving part material 22 and 22 by which crookedness formation was carried out juts out over the upper and lower sides so that it may have the thickness of depth of the step 21 concerned in the right-and-left both-sides edge by the side of the front face of the background 18 of the lower part of this step 21. the aforementioned step 21 and the upper surface sections 22b and 22b of the foot receiving part material 22 and 22 - support -- holes 23, 23, 24, and 24 are drilled on the same axis In addition, Signs 25, 25, 25a, and 25a are the mounting holes drilled in the predetermined position of the background 18 in order to attach FD3.

[0020] In "*****", crookedness formation of the keyboard receiving part material 26 is carried out at the shape of a downward KO character with the metal lever (or pipe) which has elasticity. that by which the legs 27 and 27 on either side were crooked in the shape of a "*****" crank in the middle, and the level portion was made the keyboard installation sections 28 and 28 -- it is -- the leg 27 of the right and left, and the interval between 27 -- support of right and left of the aforementioned FD installation board 17, although made equal to the interval of holes 23 and 23 the interval between the soffits of these legs 27 and 27 -- the above-mentioned support -- the elasticity widely extended a little from the interval between a hole 23 and 23 -- having -- "****" -- support of right and left of these legs 27 and 27 -- when it inserts in holes 23 and 23, and 24 and 24, the state where it was stabilized with the elasticity is held

[0021] In order to make a keyboard 14 easy to take in and out of the upper part, backward tilting of the portion of horizontal "****" 29 of the upper limit of the above-mentioned keyboard receiving part material 26 is carried out a little.

[0022] therefore, the legs 27 and 27 of right and left of the above-mentioned keyboard receiving part material 26 -- support of FD installation

board 17 -- if it inserts in holes 23 and 23, and 24 and 24, the soffit will be attached in the state where the immersion depth was decided and it was stabilized, in contact with the undersurface sections 22c and 22c of the foot receiving part material 22 and 22 (**5**)

[0023] Thereby, an interval is made between the upper part sections from the keyboard installation section 28 of the tooth back of the background 18 of FD installation board 17, and the keyboard receiving part material 26, and a keyboard 14 is laid on the keyboard installation section 28 of the keyboard receiving part material 26, and 28, and if a keyboard 14 is stood as sideways and inserted into this interval, as shown in drawing 2, a keyboard 14 can be stored behind FD3.

[0024] Since it enables it to correspond to the keyboard 14 with wide depth width of face, drawing 6 - drawing 10 enable it to attach the pre-guard 30 as shown in drawing 7 other than the keyboard receiving part material 26.

[0025] Holes 31, 32, 31, and 32 are drilled. the operation form shown in drawing 6 -- the step 21 of the background 18 of FD installation board 17 -- every two one side -- support -- Holes 33, 34, 33, and 34 are drilled. the upper surface sections 22b and 22b of the foot receiving part material 22 and 22 -- this support -- a hole 31 and 32 and coaxial line top -- support of every two one side -- The legs 35 and 35 of the right and left of the pre-guard 30 which crookedness formation is carried out at an Inverted-U character form by the above-mentioned keyboard receiving part material 26 and the same cylindrical material, and have an extension habit as shown in holes 32 and 34, and 32 and 34 at drawing 7 are inserted. support of right and left of the above-mentioned inside -- support of outside right and left -- the legs 27 and 27 of right and left of the above-mentioned keyboard receiving part material 26 are inserted in holes 31 and 33, and 31 and 33 [0026] therefore, if this FD installation board 17 is used, a keyboard 14 will be inserted between the guard 30 before the above, and the keyboard receiving part material 17, and installation storing will be carried out on the keyboard installation section 28 of the keyboard receiving part material 17, and 28 -- having -- the front of a keyboard 14 -- falling -- it is protected by the pre-guard 30 Even if the depth width of face of a keyboard 14 is wide according to this, this can be stood and it can store with sufficient stability, and the height of the background 18 of FD installation board 17 is not made high, but ** is also good.

[0027] Drawing 8 - drawing 10 are what shows the operation form which enabled adjustment of the depth width of face of a keyboard 14 so that the optimal depth might be obtained according to size. It considers as the long hole to which holes 36 and 37, and 38 and 39 extend crosswise [of FD installation board 17]. FD installation board 17 In this operation form -- support of the step 21 and the upper surface sections 22b and 22b of the foot receiving part material 22 and 22 -- support circular in the undersurface sections 22c and 22c of the foot receiving part material 22 and 22 -- holes 40 and 41 puncture -- having -- **** -- this circular support -- a hole -- support of the above-mentioned long hole -- it considers as the position which was in agreement with the axis of each **** of holes 36, 37, 38, and 39 drawing 9 -- like -- the legs 27 and 27 of the keyboard receiving part material 26 -- support -- holes 36 and 36, and 38 and 38 -- the legs 35 and 35 of the pre-guard 30 -- support, if it inserts in holes 37 and 37, and 39 and 39 It is located in the outer edge of holes 36, 36, 38, and 38. these keyboard receiving part material 26 and the extension habit of the leg of the pre-guard 30 -- these legs 24, 24, 35, and 35 -- support -- the soffit -- support of the undersurface sections 22c and 22c of the foot receiving part

Seite 5 v n 6

material 22 and 22 -- it does not fit into holes 40 and 41, but stops on the undersurface section 22c and 22c thereby -- the keyboard receiving part material 26 and the upper part section of the pre-guard 30 -- the upper part of the background 18 of FD installation board 17 -- large -- projection -- the bottom -- a state -- becoming -- the position where the position of the keyboard installation sections 28 and 28 of the keyboard receiving part material 26 is also high -- it becomes a form suitable for carrying out installation storing of the keyboard 14 with narrow him and depth width of face

[0028] To carry out installation storing of the keyboard 14 with large depth width of face If it is made to bend so that each legs 27, 27, 35, and 35 of the keyboard receiving part material 26 and the pre-guard 30 may be mutually drawn near It has consistency and inserts in holes 40, 40, 41, and 41. the soffit of these legs is shown in drawing 10 -- as -- support of the inferior-surface-of-tongue sections 22c and 22c of the foot receiving part material 22 and 22 -- The position of the keyboard installation section 28 of the keyboard receiving part material 26 also descends by descending until it contacts the upper surface of FD installation board 17, and installation storing can be improved it by stability even If the soffit of the legs 27, 27, 35, and 35 is the latus keyboard 14 of depth width of face by this.

[0029] Drawing 11 (A) - (C) is what illustrates the keyboard receiving part material and pre-guard which are prepared as an option. Drawing 11 (A) was crooked at a level with a near side in the upper part of the pre-guard 30, attached shelf board 42a in the crooked range, was used as the installation shelves 42, such as a mouse, and enables it to put accessories, such as mouse 14a and office supplies, on this installation shelf 42 so that it may illustrate to drawing 12.

[0030] Drawing 11 (B) is back crooked horizontally in the upper part of the keyboard receiving part material 26, attaches shelf board 43a in the crooked range, is used as the installation shelf 43, and enables it to put a mouse and accessories on this shelf 43 like the above.

[0031] The up frame 44 with which drawing 11 (C) was furthermore crooked to the KO typeface in the keyboard receiving part material 26, The middle frames 46 and 46 of L configuration set between the legs 45 and 45 on either side, and the soffit of the aforementioned up frame 44 and the edge crooked behind [upper-limit] the legs 45 and 45, Turn the keyboard installation sections 47 and 47 ahead, and it consists of shelf material 48 and 48 of the right-and-left couple formed by being crooked horizontally. The aforementioned up frame 44, the middle frames 46 and 46 and the middle frames 46 and 46, the legs 45 and 45 and the up frame 44, and the shelf material 48 and 48 are connected by each through the connection tubes 49, 50, and 51. Regulation of the length of each part and height is enabled by fixing with the ** screws 52, 53, and 54 in an arbitrary position.

[0032] Let the keyboard receiving part material 26 and the pre-guard 30 be FD installation equipment of a gestalt which fits use most by preparing the thing of various gestalten if needed besides the above-mentioned example. Moreover, FD support arm 2 can be similarly used, even if it is not only top-plate 1a of a desk 1 but a base only for OA equipment. Furthermore, If it requires, it is until an example was shown, and FD3 is supported, It circles and the composition of FD support arm 2 just inclines forward and backward.

[0033]

Seite 6 von 6

[Effect of the Invention] As explained above, when not using a keyboard for the installation board which lays a flat display by having enabled it to carry out installation storing of the keyboard according to this invention, it can store in the part which does not become obstructive to work, and the desk upper surface can be used widely, and one desk can perform the both sides of the operation and general office work of OA equipment convenient.

[0034] Moreover, if a pre-guard and keyboard receiving part material are attached behind the background of FD installation board and it is made to carry out installation storing of the keyboard between the guard before the above, and keyboard receiving part material, when FD is stood and stored in a horizontal position, it can dedicate with much more sufficient stability.

[0035] Furthermore the upper part of either a pre-guard or keyboard receiving part material and both sides is crooked horizontally, a shelf board is attached in the crooked range, and it considers as an installation shelf, and if it enables it to lay accessories, such as a mouse, on this shelf board, a table top can be used still more widely.

[Translation done.]

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DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] The perspective diagram showing the image of the busy condition of a flat display.

[Drawing 2] The side elevation in which showing 1 operation gestalt of the flat display installation equipment by this invention, and showing the state where installation storing of the keyboard was carried out.

[Drawing 3] The perspective diagram of FD installation board in drawing 1.

[Drawing 4] The perspective diagram of the keyboard receiving part material in drawing 1.

[Drawing 5] The perspective diagram showing the state where the keyboard receiving part material of drawing 4 was attached to FD Installation board of drawing 3.

[Drawing 6] The perspective diagram showing the modification of FD installation board.

[Drawing 7] The perspective diagram of the pre-guard used for FD installation board of drawing 6.

[Drawing 8] The perspective diagram showing other modifications of FD installation board.

[Drawing 9] The perspective diagram showing the state where keyboard receiving part material and the pre-guard were attached as an object for keyboards with small depth width of face to FD installation board of drawing 8.

[Drawing 10] The perspective diagram in the state where it carried out to keyboards with large **** depth width of face.

[Drawing 11] (A) - (C) is the perspective diagram showing the modification of a pre-guard and keyboard receiving part material.

[Drawing 12] The drawing 2 equivalent view showing the busy condition at the time of forming a mouse installation shelf to a pre-guard.

[Drawing 13] The side elevation showing a Prior art.

[Drawing 14] The perspective diagram of FD Installation board in drawing 13.

[Description of Notations]

- 1 Desk
- 2 FD Support Arm
- 3 FD (Flat Display)
- 5 Support
- 9 17 FD installation board
- 14 Keyboard
- 18 Background
- 21 Step
- 22 Foot Receiving Part Material

Seite 2 von 2

26 Keyboard Receiving Part Material
27 Leg
28 Keyboard Installation Section
30 Pre-Guard
35 Leg
42 43 Installation shelves, such as a mouse
44 Up Frame
45 Leg
46 Middle Frame
47 Keyboard Installation Section
48 Shelf Material
49, 50, 51 Connection tube

[Translation done.]